C L A I M S

[1] A nonaqueous electrolyte secondary battery which has a positive electrode containing a positive active material, a negative electrode containing a negative active material and a nonaqueous electrolyte, said secondary battery being characterized in that said positive active material comprises a mixture of a lithium transition metal complex oxide A obtained by incorporating at least Zr and Mg into $LiCoO_2$ and a lithium transition metal complex oxide B having a layered structure and containing at least Ni and Mn as the transition metal.

[2] The nonaqueous electrolyte secondary battery as recited in claim 1, characterized in that said lithium transition metal complex oxide A is represented by the chemical formula: $Li_aCo_{1-x-y-z}Zr_xMg_yM_zO_2$ (in the formula, M is at least one element selected from Al, Ti and Sn, and a, x, y and z satisfy $0 \leq a \leq 1.1$, $x > 0$, $y > 0$, $z \geq 0$ and $0 < x + y + z \leq 0.03$).

[3] The nonaqueous electrolyte secondary battery as recited in claim 1 or 2, characterized in that Zr contained in said lithium transition metal complex oxide A exists in the form of a compound adhered onto a surface of the lithium transition metal complex oxide A.

[4] The nonaqueous electrolyte secondary battery as recited in claim 3, characterized in that said Zr compound contained in said lithium transition metal complex oxide A exists in the

form of particles adhered onto said surface of the lithium transition metal complex oxide A.

[5] The nonaqueous electrolyte secondary battery as recited in any one of claims 1 - 4, characterized in that said lithium transition metal complex oxide B is represented by the chemical formula: $Li_bMn_sNi_tCo_uO_2$ (in the formula, b, s, t and u satisfy $0 \leq b \leq 1.2$, $s + t + u = 1$, $0 < s \leq 0.5$, $0 < t \leq 0.5$ and $u \geq 0$).

[6] The nonaqueous electrolyte secondary battery as recited in any one of claims 1 - 5, characterized in that said lithium transition metal complex oxide B contains substantially the same amount by mole of Mn and Ni.

[7] The nonaqueous electrolyte secondary battery as recited in any one of claims 1 - 6, characterized in that said positive active material contains 51 - 90 % by weight of the lithium transition metal complex oxide A.

[8] The nonaqueous electrolyte secondary battery as recited in any one of claims 1 - 7, characterized in that said positive and negative active materials are contained such that, when a prescribed end-of-charge voltage is 4.3 V, a ratio in charge capacity of the negative to positive electrode is 1.0 - 1.2.

[9] The nonaqueous electrolyte secondary battery as recited in any one of claims 1 - 7, characterized in that said positive and negative active materials are contained such that, when a prescribed end-of-charge voltage is 4.4 V, a ratio in charge

capacity of the negative to positive electrode is 1.0 - 1.2.